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EXAMINER	
PHAM, THIERRY L	
ART UNIT	**PAPER NUMBER**
2624	

DATE MAILED: 12/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/512,358	MATSUEDA, KAZUTAKA	
	Examiner	Art Unit	
	Thierry L Pham	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *RCE filed on 8/19/04*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to the following communication: an RCE filed on 8/19/04.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 4, and 7 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The following is a quotation of the first paragraph of 35 U.S.C. 112: The specification does not provide an adequate written description of the newly added limitations "end command" as recited in claims 1, 4, and 7; therefore, it does not enable one skilled in the art to make, use and/or practice the invention.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 8-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Kurachi (U.S. 6181436).

Regarding claim 8, Kurachi discloses an information processing apparatus as a client (client 1 and 2, fig. 6) that communicates with a server apparatus (printer server 8, fig 6) , which manages a print order, and a printer via a network (printer 3, fig. 6), comprising:

- sending means (sending device incorporated within client computer, fig. 3) for sending job information (sending print job information, col. 3, lines 45-56 and col. 9, lines 45-52), which does not include print data, to the server apparatus so that the server apparatus manages (printer server 8 for managing plurality of print jobs transmit from the clients, fig. 12, cols. 3-4 and cols. 11-12) a print order according to the job information;
- image storage means (RAM, fig. 2A, col. 11, lines 60-67 to col. 12, lines 1-15) for storing print data of a print job corresponding to the job information after sending means send the job information;
- selection means (selection device such as keyboard, col. 8, lines 63-67) for causing a user to select a spool function of said image storage means or a spool function of the server apparatus (spool function of the printer server, col. 1, lines 18-30), which is adapted to store the print data of the print job to be executed according to the print data request to the server apparatus;
- determination means (client computer, fig. 6) for determining whether the spool function (both client and printer server have spool functions, col. 1, lines 10-30 and col. 10, lines 40-67) of said image storage means is selected or the spool function of the server apparatus is selected by said selection means;
- control means (CPU 10, fig. 2a) for, if it is determined by said determination means to use the spool function of the server apparatus, transmitting (transmits via network 4, fig. 6) the print data to the server apparatus (client transmits print data to printer server 8 via network 4, fig. 6), whereas if it is determined by said determination means to use the spool function (col. 1, lines 10-30) of said image storage means, controlling said image storage means to store the print data and controlling said sending means to send the job information (job information as shown in fig. 5);
- receiving means (receiving device, fig. 3) for receiving transmission permission information from the server apparatus indicating that the print data may be transmitted to the printer (the client requests print job information from the print server, in reply, the print server transmits the

management information of the print job managed by the print server to the client, col. 2, lines 10-50 and col. 3, lines 1-15); and

• transmission means (print server generates a list of print management information indicating print job information that can be transmitted to a selected printer, col. 3, lines 5-15 and col. 5, lines 10-50) for transmitting the print data to the printer when said receiving means receives the transmission permission information from the server apparatus.

Regarding claim 9, Kurachi further discloses the information processing apparatus according to claim 8, further comprising notification means (notifying via network 4, fig. 6) for notifying the server apparatus of the selected spool function.

Regarding claim 10, Kurachi further discloses the information processing apparatus according to claim 8, wherein said selection means the user to make a selection by displaying (display monitor, fig. 5, col. 3, lines 24-38) a screen image of a use interface.

Regarding claims 11-13: Claims 11-13 are the methods corresponding the apparatus and recite limitations that are similar and in the same scope of invention as to those in claims 8-10 therefore, claims 11-13 are rejected for the same rejection rationale/basis as described in claims 8-10 above.

Claim 14 corresponds to claim 8 except computer readable memory medium for storing program is claimed rather that printing system or data output apparatus. All computers/printers have some type of computer readable memory medium (RAM, fig. 2A, Kurachi) for storing computer programs, hence claim 14 would be rejected using the same rationale as in claim 8.

Regarding claim 15, Kurachi discloses an information processing apparatus as a client (client 1 and 2, fig. 6) that communicates with a server apparatus (printer server 8, fig. 6), which manages a print order, and a printer (printer 3, fig. 6) via a network, comprising:

(1) image storage means (RAM, fig. 2A, col. 11, lines 60-67 to col. 12, lines 1-15) for storing print data of a print job to be executed according to a print request;
(2) determination means (CPU of printer server, fig. 6) for determining to user one of spool function of said image storage means or a spool function of the server apparatus based on a condition of said image storage means (spool function of printer server, col. 1, lines 18-30 and col. 10, lines 40-67), the spool function being adapted to store the print data of the print job to be executed according to the print data request to the server apparatus;
(3) control means (printer server, fig. 6) for, if it is determined from said selection means to use the spool function of the server apparatus, transmitting (client transmits print data to printer server 8 via network 4, fig. 6) the print data to the server apparatus, whereas if it is determined by from said selection means to use the spool function (col. 1, lines 10-30) of said image storage means, controlling said image storage means to store the print data;
(4) receiving means (receiving device, fig. 3) for receiving transmission permission information (the client requests print job information from the print server, in reply, the print server transmits the management information of the print job managed by the print server to the client, col. 2, lines 10-50 and col. 3, lines 1-15) from the server apparatus indicating that the print data may be transmitted to the printer; and
(5) transmission means (print server generates a list of print management information indicating print job information that can be transmitted to a selected printer, col. 3, lines 5-15 and col. 5, lines 10-50) for transmitting the print data to the printer when said receiving means receives the transmission permission information from the server apparatus.

Regarding claim 16, Kurachi further discloses the information processing apparatus according to claim 15, further comprising notification means for notifying (notifying via network 4, fig. 6) the server apparatus of the determined spool function.

Regarding claim 17, Kurachi further discloses the information processing apparatus according to claim 15, wherein said determination means make a determination according to whether or not a remaining capacity of said image storage means is equal or less than a

predetermined amount of capacity (a capacity of the rough image storing device is smaller than a capacity of the output image data storing device, col. 26, lines 46-50).

Regarding claims 18-20: Claims 18-20 are the methods corresponding the apparatus and recite limitations that are similar and in the same scope of invention as to those in claims 15-17 therefore, claims 18-20 are rejected for the same rejection rationale/basis as described in claims 15-17 above.

Claim 21 corresponds to claim 15 except computer readable memory medium for storing program is claimed rather that printing system or data output apparatus. All computers/printers have some type of computer readable memory medium (RAM, fig. 2A, Kurachi) for storing computer programs, hence claim 21 would be rejected using the same rationale as in claim 15.

Regarding claim 22, Kurachi discloses an information processing apparatus as a client (client, fig. 6) that communicates with a server apparatus (printer server, fig. 6), which manages a print order and has a spool unit for storing a print job and intermediate data of the print job (col. 1, lines 18-30 and col. 10, lines 40-67), and a printer (printer, fig. 6) via a network, comprising:

(1) image storage means (RAM, fig. 2A) for storing the print job and the intermediate data of a print job to be executed according to a print request;

(2) list acquisition means (printer server generates a list of print job, fig. 5) for acquiring a list of print jobs managed by the server apparatus;

(3) job designation means (displays preview of rough images represent print job information, fig. 5, col. 11, lines 5-13) for designating a print job to be previewed based on the list of print jobs acquired by said list acquisition means;

(4) determination means (print managing device, fig. 3) for determining whether the intermediate data of the print job designated by said job designation means is stored in said image storage means or in the server apparatus (print server generates a list of print management information indicating print job information that can be transmitted to a selected printer, col. 3, lines 5-15 and col. 5, lines 10-50);

(5) intermediate data acquisition means (the client requests print job information from the print server, in reply, the print server transmits the management information of the print job managed by the print server to the client, col. 2, lines 10-50 and col. 3, lines 1-15) for, if it is determined by said determination means that the intermediate data of the print job designated by said job designation means is stored in said image storage means, reading the intermediate data from said image storage means (displays print job management information, fig. 5), whereas if it is determined by said determination means that the intermediate data is stored in the server apparatus, downloading the image from the server apparatus (print servers sends the list of rough images represent the print job to the client, fig. 5); and
(6) control means for displaying a preview image based on the image data acquired by said image acquisition means (In each of the client apparatuses, the list in which the management information of the plurality of print jobs and the plurality of the rough images corresponding to the print job is displayed. When the user views the lists, the user can easily identify the print jobs by rough images, and select the print jobs easily and correctly, col. 3, lines 24-37 and fig. 5).

Regarding claim 23, Kurachi further discloses the information processing apparatus according to claim 22, wherein said job designation means causes a user to make a designation by displaying a screen image of a user interface (fig. 5).

Regarding claim 24, Kurachi further discloses the information processing apparatus according to claim 22, wherein the image data is an EMF file comprising intermediate data (converting device for converting the print data into picture data, such as bitmap data, col. 9, lines 38-46).

Regarding claim 25, Kurachi further discloses the information processing apparatus according to claim 24, wherein said control means displays the preview image (rough images preview, fig. 5) by controlling a displaying function of an Operating System (application program, col. 7, lines 58-63) to execute the acquired EMF file.

Regarding claims 26-30: Claims 26-30 are the methods corresponding the apparatus and recite limitations that are similar and in the same scope of invention as to those in claims 22-25 therefore, claims 26-30 are rejected for the same rejection rationale/basis as described in claims 22-25 above.

Claim 30 corresponds to claim 22 except computer readable memory medium for storing program is claimed rather that printing system or data output apparatus. All computers/printers have some type of computer readable memory medium (RAM, fig. 2A, Kurachi) for storing computer programs, hence claim 30 would be rejected using the same rationale as in claim 22.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kurachi (U.S. 6181436), and in view of Okada et al (U.S. 5822499).

Regarding claim 1, Kurachi discloses a server apparatus (printer server 8, fig. 6) adapted to communicate with at least one client (client 1 and 2, fig. 6), each client including an image storage unit (RAM, fig. 2A) for storing print data of a print job, and a printer (printer 3, fig. 6) via a network (network 4, fig. 6), comprising:

- image storage means (RAM, fig. 2B, col. 11, lines 60-67 to col. 12, lines 1-15) for storing print data of the print job to be executed according to a print request from a client;
- order management means (print job managing device, fig. 3, col. 2, lines 10-50 and col. 11, lines 60-67 to col. 12, lines 1-15) for managing print order of the print job to be executed according to the print request from the client;

• transmission means (print job sending device, fig. 6) for transmitting transmission permission information (the client requests print job information from the print server, in reply, the print server transmits the management information of the print job managed by the print server to the client, col. 2, lines 10-50 and col. 3, lines 1-15) to the client based on the print order managed by said order manage means, the transmission permission information indicating (print server generates a list of print management information indicating print job information that can be transmitted to a selected printer, col. 3, lines 5-15 and col. 5, lines 10-50) that the print data may be transmitted to the printer.

However, Kurachi does not expressly disclose a determination means for determining whether an "end command" in response to the transmission permission information is received from the client within the predetermined time; and control means for transmitting the print data of the print job of the print order from said storage means to the printer when said determination means determines that the "end command" is not received.

Okada, in the same field of endeavor for printing system (fig. 2), teaches determination means (CPU 205, fig. 2 for determining/analyzing job end command) for determining whether an end command (job end command, fig. 9-11 and fig. 18, col. 5, lines 12-45) in response to the transmission permission information is received from the client within the predetermined time; and control means (host computer, fig. 2) for transmitting (via communication bus 211, fig. 2) the print data of the print job of the print order from said storage means to the printer when said determination means determines that the end command is not received (continue to transmit the print job data to the printer unless the job end command is detected/received, fig. 9-11 and fig. 18, cols. 5, lines 10-45).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Kurachi as per teachings of Okada because of a following reason: (1) to operate a printing system efficiently by incorporating an "end command" at the end of the print job; (2) to communicate between printers and clients effectively when an "end command" is utilized/implemented; by doing so, it allows the printing system to notify users/operators when the print job is completed/finished.

Therefore, it would have been obvious to combine Kurachi with Okada to obtain the invention as specified in claim 1.

Regarding claim 2, Kurachi further discloses the server apparatus according to claim 1, if the print data of the print job to be executed by the print request form the client cannot be stored in said image storage means (it is known in the art that if the storage means of the printer server is full, then additional print data can not be stored; however, fig. 12 shows a method for manage storage capacity by removing some old print data (Delete Button 7, fig. 12) to allocate/free-up memory space) causing said order management means to manage the print order of the print job without storing the print data (the client can directly transmits the print data to the printer 3 without having to store print data in the printer server, fig. 6) of the print job in said image storage means.

Regarding claim 3, Kurachi further discloses the server apparatus according to claim 1, further comprising history storage means (print job list, fig. 12) for with each print job outputted by the printer, storing information indicative (print job information, col. 2, lines 44-50) of a client that requested the print job and a device that transmitted print data to the printer.

Regarding claims 4-6: Claims 4-6 are the methods corresponding the apparatus and recite limitations that are similar and in the same scope of invention as to those in claims 1-3 therefore, claims 4-6 are rejected for the same rejection rationale/basis as described in claims 1-3 above.

Claim 7 corresponds to claim 1 except computer readable memory medium for storing program is claimed rather that printing system or data output apparatus. All computers/printers have some type of computer readable memory medium (RAM, fig. 2A, Kurachi) for storing computer programs, hence claim 7 would be rejected using the same rationale as in claim 1.

Response to Arguments

7. Applicant's arguments filed 8/19/04 along with RCE have been fully considered but they are not persuasive.

Regarding independent claims 1, 8, 15, and 22, an applicant argued the cited prior art (Kurachi) does not teach a client apparatus including a storage device for storing the generated print data. Fig. 2A shows a layout structure of a client apparatus as shown in fig. 1 that includes RAM and ROM (col. 7, lines 25-64) storage device for storing the generated print data.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents/publications are relevant to applicant's disclosure invention.

- U.S. 6633400 to Sasaki et al, teaches a networked print system including printer server and client apparatus, and each having a spool function.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thierry L Pham whose telephone number is (703) 305-1897. The examiner can normally be reached on M-F (9:30 AM - 6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K Moore can be reached on (703)308-7452. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thierry L. Pham

Gabriel Garcia

GABRIEL GARCIA
PRIMARY EXAMINER